



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/575,183	05/23/2000	Paul Lapstun	NPK002US	9150
24011	7590	05/05/2004	EXAMINER	
SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA			TRAN, TONGOC	
		ART UNIT	PAPER NUMBER	
		2134	S	

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

21

Office Action Summary	Application No.	Applicant(s)
	09/575,183	LAPSTUN ET AL.
Examiner	Art Unit	
Tongoc Tran	2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 February 2004.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-8 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

DETAILED ACTION

1. This office action is in response to applicants' amendment filed on 12/13/2004.

Claim 1 is amended. Claims 1-8 are pending.

Response to Arguments

2. Applicant's arguments with respect to amended claim 1 have been considered but are moot in view of the new ground(s) of rejection. In response to Applicants' argument in respect to claim 8, Applicants contend that Debry ['521] does not teach transmit a secret unique identifier over the network. Examiner respectfully disagrees. Debry discloses in col. 8, lines 56-64 the printer encrypts a messaging containing the printer's model number (public unique identifier) and serial number (secret unique identifier) and IP address and send this message to the server. Further, Debry teaches an encryption key included in the message (see Abstract).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Debry (U.S. Patent No. 6,314,521, hereinafter Debry ['521]) in view of Newton et al. (U.S. Patent No. 5,771,291, hereinafter Newton).

In respect to claim 1, Debry ['521] discloses "a network connectable to a printer and a registration server, a network registration protocol for registering the printer on the network, including the steps of

installing a secret unique identifier in the printer and in a database of the registration server, before the printer is connected to the network (see col. 8, lines 56-64);

transmitting the secret unique identifier from the printer to the registration server and receiving the identifier in the registration server using a secure transmission server over said network, when the printer is connected to the network (see col. 6, lines 36-43); and

Debry discloses authenticating the printer to the server by comparing the secret unique identifier sent both in encrypted form and in clear sent from the printer and by decrypting with the printer's secret key stored in the server's database but does not explicitly discloses verifying the identifier with the identifier installed in the database of the server (see col. 8, line 65-col. 9, line 14). However, Newton discloses a user sends a unique identification key to a server and the server decrypts the unique identification key and compare said key with what is stored in the data and verifies the user's identity (see col. 4, lines 9-27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teaching of Debry's of authenticating a printer and a server (certification authority is a server) with the teaching of Newton's authentication program that authenticate a user identity by comparing it to the one stored in the server's database to prevent an intruder from obtaining

unauthorized access to the user's account through a purloined user ID and password (Newton, col. 1, lines 9-20).

In respect to claim 2, Debry ['521] discloses the network registration protocol according to claim 1, including the further step of "holding said secret unique identifier in non-volatile memory in said printer together with a public unique identifier" (see col. 8, lines 56-64, model number and serial number).

4. Claims 3-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Debry (U.S. Patent No. 6,314,521) hereinafter Debry ['521] in view of Debry (U.S. Patent No. 385,728) hereinafter Debry ['728].

In respect to claim 8, Debry ['521] discloses "a network registration signal for transmission over a network from a printer to a remote registration server to register the printer with the server, where the signal is transmitted at the first occasion the printer is connected to the network, and includes: a secret unique identifier and a public unique identifier retrieved from non-volatile memory in the printer and a public key which is created, together with a paired secret key, in the printer" (see col. 8, lines 56-64), "so that upon receipt of the signal at the registration server the secret unique identifier and public unique identifier are tested to verify the identifier of the printer and, in the event the printer's identity is verified, a certificate is created and signed which contains the printer's public unique identifier and a public signature key" (see col. 8, line 65-col. 9, line 14).

Debry ['521] does not explicitly discloses said printer create a public key together with a paired secret key. However, Debry ['728] discloses an encryption key can be generated in a printer (see col. 10, lines 12-19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement of the teaching of Debry ['728] to generate key in the printer instead of generate the key by the printer's manufacture as taught by Debry ['521] for better protection of the key from the third party like the manufacture of the device.

In respect to claim 3, Debry ['521] discloses the network registration protocol according to claim 2, including the further step of "creating a public key together with its paired private key in said printer". However, Debry ['728] discloses an encryption key can be generated in a printer (see col. 10, lines 12-19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement of the teaching of Debry ['728] to generate key in the printer instead of generate the key by the printer's manufacture as taught by Debry ['521] for better protection of the key from the third party like the manufacture of the device.

In respect to claim 4, Debry ['521] and Debry ['728] disclose the network registration protocol according to claim 3, Debry ['521] further discloses the step of, "at said time the printer is connected to the network, transmitting the secret unique identifier, the public unique identifier over the network to the registration server using said secure transmission (see col. 8, lines 56-64). Debry ['521] does not disclose transmitting the public key over the network to the registration server. However, Debry ['728] discloses a printer sending a request with the printer's public key to the file server

(col. 13, lines 49-53, col. 13, line 65-col. 14, line 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Debry ['728] to send the public key to the registration server so that the server can use the public key to encrypt the file that only the printer has the secret key to decrypt for a more secure data transmission.

In respect to claim 5, Debry ['521] discloses the network registration protocol according to claim 4. Debry ['521] further discloses the step of "testing the received secret unique identifier and public unique identifier in the remote registration server to verify the identity of the printer (see col. 8, line 65-col. 9, line 14).

In respect to claim 6, Debry ['521] discloses the network registration protocol according to claim 5. Debry ['521] further discloses "said printer obtaining said registration server's certificate, authenticating it with reference to a certificate authority, using a public key-exchange key in said certificate to exchange a secret session key with the server, and then use said secret session key to encrypt said transmission (see col. 9, lines 15-34).

In respect to claim 7, Debry ['521] discloses the network registration protocol according to claim 6. Debry ['521] further discloses " in the event the printer's identity is verified, of creating and signing a certificate containing said printer's public unique identifier and public signature key, in said server; and storing the printer's certificate in a database for retrieval by third parties wishing to exchange data with the printer" (see col. 6, lines 52-64, col. 5, line 65-col. 6, line 12).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tongoc Tran whose telephone number is (703) 305-7690. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A. Morse can be reached on (703) 308-4789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Tongoc Tran
Art Unit: 2134

TT

April 30, 2004

Matthew B. Smithers
MATTHEW SMITHERS
PRIMARY EXAMINER
Art Unit 2137